



## Volume contents

### Volume 98 (1997)

Cell aging in vivo and in vitro H. Rubin (Berkeley, CA) . . . . .	1
Insulin receptors in mouse brain: age-related modifications are corrected by thymus graft A. Zaia, L. Piantanelli (Ancona, Italy) . . . . .	37
Physiological basis for long life span M. Yong-Xing, Z. Yue, W. Zan-Shun, C. Shu-Qi, L. Zi-Jun, Z. Jian-Gang, G. Qi, H. Lin (Shanghai, People's Republic of China) . . . . .	47
Expression and catalytic activities of protein tyrosine kinases (PTKs) Fyn and Lck in peripheral blood T cells from elderly humans stimulated through the T cell receptor (TCR)/CD3 complex Ronald L. Whisler, Scott E. Bagenstose, Yvonne G. Newhouse, Kristen W. Carle (Columbus, OH) . . . . .	57
Contribution of IL-1 $\beta$ to the enhancement of <i>Campylobacter rectus</i> lipopolysaccharide-stimulated PGE <sub>2</sub> production in old gingival fibroblasts in vitro H. Takiguchi, M. Yamaguchi, H. Okamura, Y. Abiko (Chiba, Japan) . . . . .	75
Instructions to authors . . . . .	91
Sites and mechanisms responsible for the low rate of free radical production of heart mitochondria in the long-lived pigeon A. Herrero, G. Barja (Madrid, Spain). . . . .	95
H <sub>2</sub> O <sub>2</sub> -derived free radicals treated fibronectin substratum reduces the bone nodule formation of rat calvarial osteoblast H. Suzuki, M. Hayakawa, K. Kobayashi, H. Takiguchi, Y. Abiko (Chiba, Japan) . . . . .	113
Effect of donor age on the susceptibility of erythrocytes and erythrocyte membranes to cumene hydroperoxide-induced oxidative stress İ. Onaran, A.S. Yalçın, G. Sultuybek (Istanbul, Turkey) . . . . .	127

The role of 11 $\beta$ -hydroxysteroid dehydrogenase in maturation of the intestine I. Pohlová, I. Mikšík, J. Pácha (Prague, Czech Republic) . . . . .	139
T-Kininogen present in the liver of old rats is biologically active and readily forms complexes with endogenous cysteine proteinases D. Keppler, B. Sordat, F. Sierra (Lausanne, Switzerland; Philadelphia, PA). . . . .	151
Human mortality at very advanced age might be constant P. Klemra, S. Doubal (Hradec Králové, Czech Republic). . . . .	167
Lipid peroxidation and antioxidant enzymes in livers and brains of aged rats S. Dođru-Abbasođlu, S. Tamer-Toptani, B. Uđurnal, N. Koçak-Toker, G. Aykaç-Toker, M. Uysal (Istanbul, Turkey). . . . .	177
Erratum. . . . .	181

**Special Issue: The Role of Molecular Genetics in Longevity Sciences**  
**Proceedings of the First International NILS Workshop on Longevity Sciences**  
**Obu, Japan, November 29, 1996**

Preface . . . . .	185
Transgenic mouse models for studying mutations in vivo: applications in aging research J. Vijg, M.E.T. Dollé, H.-J. Martus, M.E.T.I. Boerrigter (Boston, MA) . . . . .	189
Analysis and modulation of DNA repair in aging C.A. Walter, D.T. Grabowski, K.A. Street, C.C. Conrad, A. Richardson (San Antonio, TX). . . . .	203
Molecular genetic approaches to the genes of longevity, aging and neurodegeneration in mammals N. Mori (Aichi, Kyoto, Japan). . . . .	223
Age changes in signal transduction and gene expression G.S. Roth (Baltimore, MD). . . . .	231
Hierarchical deterioration of body systems in Werner's syndrome: Implications for normal ageing M. Goto (Tokyo, Japan) . . . . .	239
Molecular and epidemiological studies of Werner syndrome in the Japanese population T. Miki, J. Nakura, L. Ye, N. Mitsuda, A. Morishima, N. Sato, K. Kamino, T. Ogiyara (Osaka, Japan). . . . .	255
Author index. . . . .	267
Subject index. . . . .	269
Volume contents. . . . .	273

